

13.0 PUBLIC HEALTH AND SAFETY, AND HAZARDOUS MATERIALS

13.1 INTRODUCTION AND METHODOLOGY

This chapter discusses potential hazards to the environment, the public, and worker health and safety associated with the construction and operation of the project, including potential fire hazards and releases or encounters with existing hazardous substances, as well as with helicopter use during construction. With implementation of the proposed mitigation activities presented below, the project will not result in significant impacts.

Please refer to Chapter 16, Corona and Induced Current Effects, for a separate discussion of potential impacts related to induced currents and fuel ignition, fires, lightening and cardiac pacemakers. Appendix H contains information regarding scientific research and CPUC policies on potential health concerns related to electric and magnetic fields (EMFs).

An environmental database search report was obtained from Environmental Data Resources, Inc. (EDR) on September 3, 2003. The report identified sites in the project vicinity that are registered on one or more environmental oversight agency database lists. Sites of potential concern were identified from one or more of the following lists:

- National Priority List
- Comprehensive Environmental Response, Compensation and Liability Information System
- California Hazardous Material Incident Report System
- California Department of Toxic Substances Control's (DTSC's) Annual Work Plan
- California DTSC Sites
- California EPA Department of Toxic Substances Control Hazardous Waste and Substances Site list (CORTESE List)
- Waste Management Unit Database System
- Leaking Underground Storage Tanks
- California Regional Water Quality Control Board (RWQCB) Spill, Leak, Investigation, and Cleanup sites

Using the EDR report, PG&E performed a review of regulatory agency files to determine where potential or existing contamination could be encountered during construction of the project. In determining which vicinity sites pose the greatest risk to the project, the following site characteristics were considered:

- Site density - the more listed sites in the area, the greater risk of encountering contamination.
- Type of release and media affected - in general, contaminants migrate more readily in groundwater than in soil. The volume of contaminant released, release date, and media impacted all affect how contaminants may have migrated and, therefore, their potential to impact the project.
- Type of contamination - the disposal and/or reuse of soil or groundwater containing fuel-related petroleum compounds is typically easier to manage than other chemicals of potential concern. Hazardous materials vary considerably in their toxicity and ability to migrate through the subsurface.
- Intervening actions - intervening actions such as remedial efforts performed to date have considerable effect on the potential for the contaminant to impact the project. Sites designated “case closed” by regulatory oversight agencies are not typically considered to be of concern.
- Distance and direction from the project – groundwater flow direction and distance from the source material affect the ability of the hazardous material release site to impact the project.

13.2 REGULATORY FRAMEWORK

The California Environmental Protection Agency’s Department of Toxic Substances Control (DTSC) regulates hazardous waste, oversees the cleanup of existing contamination, and looks for ways to reduce the amount of hazardous waste produced in California. The DTSC regulates hazardous waste in California under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code.

The Regional Water Quality Control Board (RWQCB)—Region 2 is responsible for protecting the beneficial uses of water resources in the greater San Francisco Bay Area, including the project vicinity. The RWQCB—Region 2 adopted a Water Quality Control Plan (Basin Plan) in June 1995, and amendments to the plan in April 2000. The plan sets forth implementation policies, goals, and water management practices in accordance with the Porter-Cologne Water Quality Control Act. The Basin Plan establishes both numerical and narrative standards and objectives for water quality specific to the Bay Area aimed at protecting aquatic resources. Discharges to surface waters in the region are subject to regulatory standards set forth in the Basin Plan.

The Sonoma County Local Oversight Program (LOP) oversees the investigation and cleanup of fuel releases from underground storage tanks in all areas of the county, with the exception of the cities of Santa Rosa and Healdsburg. Sites are entered into the LOP when a release from an underground

tank is reported. This typically happens when an underground tank is removed, and signs of a release are either obvious or reported in laboratory sample results. Releases are also reported when contamination is found while repairing fuel delivery systems, or when Phase II environmental site assessments are performed at the time of property sales. Once entered into the LOP, the site must be investigated and cleaned up in accordance with the California Underground Storage Tank Regulations, Sonoma County Program Guidelines for Site Investigations, and Regional Water Quality Control Board water quality objectives.

The Emergency Management Division of the Department of Emergency Services (DES) is responsible for the planning, coordination of response, recovery, and mitigation activities related to countywide emergencies and disasters. The DES is the lead agency for the Sonoma Operational Area and serves as the primary coordination point for emergency management's communication between federal, state, and local levels. They develop emergency operation plans for the county, cities, and districts; conduct training and educational outreach programs related to emergency preparedness; and sponsor emergency management training. The local representative of the DES in the project area is the Sonoma Fire Department. Fire Stations #1 and #2 are located at 630 2nd Street West and 877 Center Street.

The Fire Services Division coordinates fire service activities in the unincorporated areas of Sonoma County (County Service Area #40), advises the Board on fire service issues, assists with disaster program planning and emergency response planning, responds to emergency situations, and reviews program and policy matters with the Board of Supervisors. The Division administers contracts for fire prevention, code enforcement and plan review with local fire districts. The Division responds to emergency incidents in its assigned area and assists local fire agencies and the State Department of Forestry (CDF). In addition, CDF responds to State responsibility wildland areas within the county.

Several different types of helicopters will be used during the construction of this line. Large helicopters ("skycranes") will be used for the installation of some new poles. Small helicopters may be used for conductor removal and installation, as well as material, equipment and personnel transportation. The Federal Aviation Administration (FAA) requires a Lift Plan for use of helicopters in populated areas. The Lift Plan includes identification of helicopter staging areas and flight paths with the least potential to affect populated areas within the distances specific by FAA. At elevations where damage from downdraft can occur, FAA regulations require that a skycrane cannot fly within 150 feet laterally of an occupied structure, including homes, buildings, and roads. A loaded skycrane (i.e., one carrying equipment or material) cannot fly within 300 feet laterally of an occupied structure. Structures are required to be unoccupied if the required distances cannot be maintained during the flight. As currently planned, it is anticipated that flight paths for the project will not require residents to vacate their homes.

13.3 EXISTING CONDITIONS

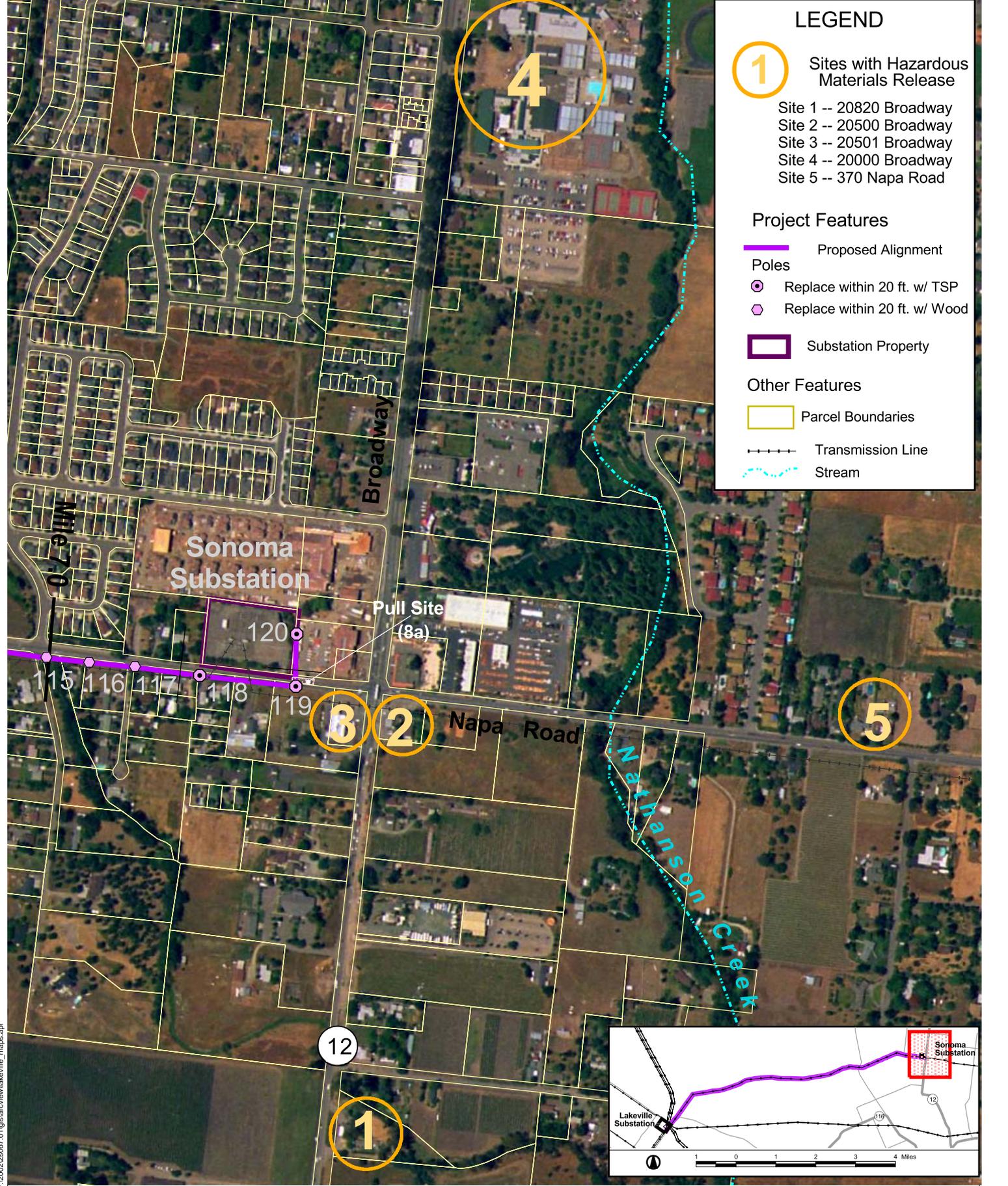
Five listed vicinity sites known to be associated with a historic release of hazardous materials are shown in Table 13-1 and Figure 13-1. After conducting a file review with the Sonoma County Department of Health Services, it appears that none of these sites have the potential to impact the project. None of the identified sites are situated in the path of the project. All of the sites are located in the assumed hydraulically downgradient direction, so groundwater flow is away from the project. Therefore, it is unlikely that project construction activities will encounter hazardous materials in soil or groundwater.

**Table 13-1
Vicinity Sites With Known Hazardous Material Releases**

Fig 13-1	EDR	Name	Address	Issues
1	1	Time Oil Jackpot	20820 Broadway Rd.	<ul style="list-style-type: none"> ▪ October 1988: One 4,000-gallon, one 8,000-gallon, and one 12,000-gallon gasoline USTs were removed. A 500-gallon waste oil UST was also removed at the same time. 400 cubic yards of soil were stockpiled on-site and 600 gallons of water were pumped out of the excavation. High chromium levels were detected in the groundwater, reportedly due to local rock formation rich in chromium. ▪ This site is located east of the project, at a location that appears to be hydraulically downgradient of the project.
2	A2	Four Corners Service	20500 Broadway Rd	<ul style="list-style-type: none"> ▪ March 2001: Two 5,000-gallon and one 10,000-gallon gasoline USTs, one 2,000-gallon diesel and a 250-gallon waste oil USTs were removed. An area of 1,140 square feet was excavated to depths between 9.5 and 15 feet. Soil was stockpiled and used to backfill the waste oil tank excavation pit. ▪ July 2002: Over excavation work began at the locations of the former diesel and gasoline USTs. Additional work was conducted to remove soil that had been used to backfill the original waste oil UST excavation. ▪ August 2002: Excavations were backfilled using pea gravel. Approximately 1,000 cubic yards of soil were excavated and sent to Forward Landfill. Groundwater removed from the excavation totaled 18,000 gallons. ▪ This site is located east of the project, at a location that appears to be hydraulically downgradient of the project.

Table I3-1
Vicinity Sites With Known Hazardous Material Releases

Fig I3-1	EDR	Name	Address	Issues
3	A3	Daniel Auto Repair	20501 Broadway Rd.	<ul style="list-style-type: none"> ▪ May 1986: Four 1,000-gallon gasoline USTs were removed from the site. ▪ June 1986: 2,100 cubic yards of soil were excavated in the vicinity of the former USTs. ▪ March 2001: Additional excavation work was conducted. ▪ This site is located east of the project, at a location that appears to be hydraulically downgradient of the project.
4	8	Sonoma Valley High School	20000 Broadway Rd.	<ul style="list-style-type: none"> ▪ July 1996: A 500-gallon waste oil tank was removed and the tank appeared to be in good condition. No groundwater was present in the excavation. 10 cubic yards of slightly contaminated soil were excavated and disposed of off-site. Also, two 10,000-gallon gasoline and diesel USTs were removed. ▪ July 2000: A 350-gallon gasoline tank was removed and 2 holes were observed in the tank. Strong odor and pit discoloration were noted. ▪ May 2002: Three monitoring wells were installed, as required by Sonoma County Health Services. ▪ August 2002: A work plan for additional investigation was required by Sonoma County Department of Health Services. ▪ This site is located east of the project, at a location that appears to be hydraulically downgradient of the project.
5	89	Jacoboni Property	370 Napa Road	<ul style="list-style-type: none"> ▪ In 1989, a gasoline UST was excavated and removed. ▪ In 1990, contaminated soil was excavated and removed. MTBE was detected. ▪ This site is located east of the project, at a location that appears to be hydraulically downgradient of the project.



LEGEND

- 1** Sites with Hazardous Materials Release
 - Site 1 -- 20820 Broadway
 - Site 2 -- 20500 Broadway
 - Site 3 -- 20501 Broadway
 - Site 4 -- 20000 Broadway
 - Site 5 -- 370 Napa Road

Project Features

- Proposed Alignment
- Poles**
 - Replace within 20 ft. w/ TSP
 - Replace within 20 ft. w/ Wood

- Substation Property

Other Features

- Parcel Boundaries
- +—+—+— Transmission Line
- - - - - Stream

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Source: AirPhotoUSA (April, 2002) / PG&E 2004 / Environmental Data Resources, Inc. 2003 / EDAW, Inc. 2004

Lakeville-Sonoma 115kV Transmission Line Project

FIGURE 13-1

Sites with Known Hazardous Material Releases

13.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

13.4.1 Significance Criteria

Standards of significance were derived from Appendix G of the CEQA Guidelines. Project impacts are considered significant if they:

- Create a hazard to public health or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous materials within 0.25 mile of a school.
- Are located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a hazard to the public or the environment.
- Are located within two miles of a public or private airport and would result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response or evacuation plan.
- Expose people or structures to a risk of loss, injury, or death involving wild land fires.

13.4.2 Construction Impacts

As there are no airports within two miles of the project, there will be no impact to airports from project construction. Approximately two miles of the project parallels Leveroni Road, a major thoroughfare that could be used as an evacuation route under some emergency scenarios. In the event of an emergency, crews will cease all work and remove any equipment that would impede the flow of traffic.

Portions of the existing project corridor will be constructed through open grass and oak woodland areas that are susceptible to wildland fires. Heat or sparks from vehicles or equipment have the potential to ignite dry vegetation and cause a fire. Vehicles and equipment will primarily use existing roads to access the transmission pole sites. Project personnel will be directed to park away from dry vegetation and will be required to carry water and shovels or fire extinguishers in times of high fire hazard. PG&E will also prohibit trash burning and restrict smoking to cleared areas. By following the preventative measures, the potential for fire will be reduced to less than significant.

Many of the existing wood poles will be removed and replaced with tubular steel poles. These wood poles will be disposed of at a landfill authorized to receive them or they would be reused or recycled. If the existing wood poles are wrapped with CuNap wrap, it would be removed, placed in a Department of Transportation (DOT)-approved container, labeled as hazardous waste and including project information and transported back to a consolidation area on a remote waste shipping paper. This, however, is not anticipated to create a hazard to public health or the environment as materials would be handled and transported according to federal, state and local laws.



Impact 13.1 Potential for Spills during Construction.

Project construction will require the use of motorized heavy equipment including trucks, cranes, backhoes, and air compressors. This equipment requires fuel and liquid replenishment in the form of gasoline, diesel, oil, hydraulic fluid, antifreeze, transmission fluid, lubricating grease, and other fluids. Surface water and/or groundwater quality could be impacted by an accidental release of one or more of these materials from a vehicle or motorized piece of equipment. Additionally, a release of liquid concrete during foundation construction activities could wash into nearby waterways or infiltrate the soil.

There is a small church school on Highway 12, south of Leveroni / Napa Road, which is about 0.20-mile from the Sonoma Substation (see Figure 11-1). As construction activities will involve some hazardous emissions from vehicles and handling of hazardous materials within 0.25 mile of a school, this is considered a potentially significant impact (under the above-mentioned significance criteria). However, Mitigation Measure 13.1, prevailing westerly winds, the school's distance from the construction corridor (0.20-mile), and the fact that construction equipment will only be in the area temporarily would reduce this to a less than significant impact.

Mitigation Measure 13.1. A Hazardous Substance Control and Emergency Response Plan will be prepared for the project. It will prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to a hazardous material. The plan will provide a discussion of appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The plan will be submitted to the Hazardous Material Unified Program Agency, or another appropriate oversight agency, for approval prior to initiating excavation activities.

Emergency-spill supplies and equipment will be kept adjacent to all areas of work and in staging areas, and will be clearly marked. Oil-absorbent material, tarps, and storage drums will be used to contain and control any minor releases. Detailed information for responding to accidental spills, and for handling any resulting hazardous materials, will be provided in the project's Hazardous Substances Control and Emergency Response Plan.

An environmental training program will be established to communicate environmental concerns and appropriate work practices to all construction field personnel. The training program will emphasize site-specific physical conditions to improve hazard prevention and will include a review of the Hazardous Substances Control and Emergency Response Plan and the Storm Water Pollution Prevention Plan.



Impact 13.2 Operation of “Skycrane” Helicopters in Populated Areas.

It is PG&E’s normal practice for operation of “skycrane” construction helicopters to have the helicopter vendor develop and implement a Lift Plan for approval by FAA. The plan will establish flight paths away from populated areas to the extent feasible to perform helicopter required work. As noted above, PG&E does not presently anticipate that residents will be required to temporarily vacate their homes. In the unlikely event that final construction plans and the Lift Plan require otherwise, PG&E will coordinate with potentially affected residents to minimize the duration of the necessary work and any resulting inconvenience. Operation of the “skycrane” helicopters in populated areas can pose a risk to structures or persons; however, with implementation of the Lift Plan (Mitigation Measure 13.2), the risk will be less than significant.

Mitigation Measure 13.2. A Lift Plan will be prepared and approved by the FAA prior to all “skycrane” construction helicopter operations. The need for short-term road closures, if any, will be identified in the Lift Plan and will be coordinated with the appropriate jurisdictions as described in Chapter 14, Transportation and Traffic.

13.4.3 Operation Impacts

During project operation, motorized vehicles will be used on the project site. These vehicles contain substances that, if released to the environment, could be hazardous. These substances include gasoline, diesel, antifreeze, automotive lubricants, and motor oil. However, this potential hazard already exists with present operations, and there would be no change in the use of hazardous materials resulting from this project. As a result, there will be no impact from project operations.

In the past, several chemicals used at substations and switchyards have been considered to be hazardous materials. However, recent decisions by California’s regulatory agencies have made clear that mineral oil, sulfur hexafluoride gas, and the chemicals found in substation batteries are not considered hazardous materials. In the unlikely event that any of these materials are released during project operations, there will be no impact to the public or environment since these materials are not considered hazardous.

As there are no airports within two miles of the project, there will be no impact to airports from project operation.

13.5 REFERENCES

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